

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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|------------------------------|---|-------------------------|
| IN RE APPLICATION: | § | EXAMINER: Unknown |
| ELAN YOGESWAREN | § | |
| SERIAL NO. | § | GROUP ART UNIT: Unknown |
| FILED: | § | |
| FOR: COMPOSITE BACKING LAYER | § | |
| FOR A DOWNHOLE ACOUSTIC | § | |
| SENSOR | § | |

Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT

Pursuant to Applicant's duty, under 37 C.F.R. § 1.56, 1.97 and 1.98, to disclose all relevant material, the Applicant lists below the following references believed to be relevant to the subject matter of the above-identified application:

| | <u>U.S. Patent No.</u> | <u>Issue Date</u> | <u>Inventor</u> |
|-----|------------------------|-------------------|-----------------|
| 1. | 3,553,640 | January 5, 1971 | Zemanek |
| 2. | 4,382,201 | May 3, 1983 | Trzaskos |
| 3. | 4,485,321 | November 27, 1984 | Klicker, et al. |
| 4. | 4,523,122 | June 11, 1985 | Tone et al. |
| 5. | 4,571,693 | February 18, 1986 | Birchak et al. |
| 6. | 4,628,223 | December 9, 1986 | Takeuchi et al. |
| 7. | 4,665,511 | May 12, 1987 | Rodney et al. |
| 8. | 4,800,316 | January 24, 1989 | Ju-Zhen |
| 9. | 4,890,268 | December 26, 1989 | Smith et al. |
| 10. | 5,130,950 | July 14, 1992 | Orban et al. |

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|-----|--------------|-------------------|-------------------|
| 11. | RE 34,975 | June 20, 1995 | Orban et al. |
| 12. | 5,469,736 | November 28, 1995 | Moake |
| 13. | 5,486,695 | January 23, 1996 | Schultz et al. |
| 14. | 6,213,250 B1 | April 10, 2001 | Wisniewski et al. |
| 15. | 6,467,140 B2 | October 22, 2002 | Gururaja |

FOREIGN PATENT DOCUMENTS

| | <u>Foreign Patent No.</u> | <u>Country</u> | <u>Issue Date</u> | <u>Name</u> |
|----|-------------------------------|----------------|-------------------|---------------|
| 1. | 2,156,984 A | UK | October 16, 1985 | Rodney et al. |

OTHER DOCUMENTS

1. McKeighen, R.E., "Design Guidelines for Medical Ultrasonic Arrays", SPIE International Symposium on Medical Imaging, Feb. 25, 1998.
2. Ohm, R.F., "The Vanderbilt Rubber Handbook, 13th Ed.", R.T. Vanderbilt Company, Inc., Nowalk, CT, 1990, pages 211-222.
3. Smith, W.A., "New Opportunities in Ultrasonic Transducers Emerging from Innovations in Piezoelectric Materials", SPIE Vol. 1733, 1992, pages 3-26.
4. Product Literature obtained from Ohara Corporation, 23141 Arroyo Vista, Santa Margarita, CA, downloaded July 2003. <http://www.oharacorp.com/swf/ap.html>.
5. Product Literature obtained from Corning Glass Works Corporation, Houghton Park, New York, June 2003.
6. Product Literature "Dyneon Fluoroelastomer FE5623", obtained from Dyneon, Decatur, Alabama, June 2003.
7. Product Literature "Dyneon Fluoroelastomer FC2178", obtained from Dyneon, Decatur, Alabama, June 2003.

8. Product Literature "Dyneon Fluoroelastomer FC2181", obtained from Dyneon, Decatur, Alabama, June 2003.

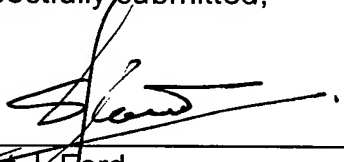
9. Technical Information "Viton®B-50", DuPont Dow elastomers, dated December 1998, Wilmington, Delaware 19809.

Applicant respectfully submits that the invention in the above-identified application is patentably distinguishable over the cited references known to Applicant and disclosed in the above Information Disclosure Statement.

This Information Disclosure Statement is being filed **within** three months of the filing date of this national application or the date of entry of the national stage as set forth in § 1.491 in an international application.

Respectfully submitted,

Date: July 3, 2003



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|---|---|----|---|--------------------------|----------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | |
| | | | | Filing Date | |
| | | | | First Named Inventor | |
| | | | | Art Unit | |
| | | | | Examiner Name | |
| Sheet | 1 | of | 1 | Attorney Docket Number | PAT027US |

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| Examiner Initials* | Cite No. | Document Number | | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number-Kind Code (if known) | | | | |
| | AA | US- | 3,553,640 | 01-05-1971 | Zemanek | |
| | AB | US- | 4,382,201 | 05-03-1983 | Trzaskos | |
| | AC | US- | 4,485,321 | 11-27-1984 | Klicker, et al. | |
| | AD | US- | 4,523,122 | 06-11-1985 | Tone et al. | |
| | AE | US- | 4,571,693 | 02-18-1986 | Birchak et al. | |
| | AF | US- | 4,628,223 | 12-09-1986 | Takeuchi et al. | |
| | AG | US- | 4,665,511 | 05-12-1987 | Rodney et al. | |
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| | AK | US- | RE 34,975 | 06-20-1995 | Orban et al. | |
| | AL | US- | 5,469,736 | 12-28-1995 | Moake | |
| | AM | US- | 5,486,695 | 01-23-1996 | Schultz et al. | |
| | AN | US- | 6,213,250 B1 | 04-10-2001 | Wisniewski et al. | |
| | AO | US- | 6,467,140 B2 | 10-22-2002 | Gururaja | |

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|--------------------------|-------------|-------------------------------|--|--------------------------------|--|---|----------------|
| Examiner Initials* | Cite No. | Foreign Patent Document | | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ¹ |
| | | Country Code-Number-Kind Code | | | | | |
| | AP | GB-2,156,984-A | | 10-16-1985 | Rodney et al. | | |

| OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS | | | | |
|---|-------------|--|--|----------------|
| Examiner Initials* | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | | T ¹ |
| | | | | |
| / | AQ | McKeighen, R.E., "Design Guidelines for Medical Ultrasonic Arrays", SPIE International Symposium on Medical Imaging, Feb. 25, 1998. | | |
| / | AR | Ohm, R.F., "The Vanderbilt Rubber Handbook, 13 th Ed.", R.T. Vanderbilt Company, Inc., Nowalk, CT, 1990, pages 211-222. | | |
| | AS | Smith, W.A., "New Opportunities in Ultrasonic Transducers Emerging from Innovations in Piezoelectric Materials", SPIE Vol. 1733, 1992, pages 3-26. | | |
| | AT | Product Literature Obtained from Ohara Corporation, 23141 Arroyo Vista, Santa Margarita, CA, June 2003. http://www.oharacorp.com/swf/ap.html | | |
| | AU | Product Literature obtained from Corning Glass Works Corporation, Houghton Park, New York, June 2003. | | |
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| | AW | Product Literature "Dyneon Fluoroelastomer FC2178", obtained from Dyneon, Decatur, Alabama, June 2003. | | |
| | AX | Product Literature "Dyneon Fluoroelastomer FC2181", obtained from Dyneon, Decatur, Alabama, June 2003. | | |
| | AY | Technical Information "Viton®B-50", DuPont Dow elastomers, dated December 1998, Wilmington, Delaware 19809. | | |

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|--------------------|-----------------|
| Examiner Signature | Date Considered |
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.

¹Applicant is to place a check mark here if English language Translation is attached.